

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously presented) A method of sensing the concentration of O₃ in a gas mixture using a semiconductor gas sensor having a resistivity sensitive to O₃, which comprises increasing the sensor operating temperature to a first temperature to allow the sensor surface to reset then decreasing the sensor operating temperature to a second temperature and analyzing the resultant resistance of the sensor at the second temperature, wherein the sensor is a layer of WO₃, the first temperature is 400 to 800 °C, the second temperature is 200 to 500 °C, and the first temperature is higher than the second temperature.

3. (Previously presented) A method according to claim 1 wherein the sensor resistance is analyzed as a function of time.